## Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

## **Listing of Claims:**

Claims 1-2 (canceled).

Claim 3 (currently amended):

A projection system comprising:

an oscillating mirror;

a laser light source, wherein a projection light bundle is produced starting from the laser light source using the oscillating mirror, and

at least one light sensor, arranged at an edge region of the projection light bundle that detects a position of the oscillating mirror using a modulated brightness level obtained from the at least one light sensor.

Claim 4 (previously presented): The projection system as claimed in claim 3, wherein the brightness of the projection light bundle is modulated at least in a partial region of an image to be projected, and the position of the oscillating mirror is determined by correlating the modulation of the projection light bundle with a detector signal from the light sensor.

Claim 5 (previously presented): A method for operating a projection system, comprising:

modulating a brightness level at least in a partial region of an image to be projected in the projection system;

obtaining the modulated brightness level from a light sensor; and

detecting an oscillation status of an oscillating mirror, a position of the oscillating mirror, and a specific characteristic of the modulated brightness level using the modulated brightness level obtained from the light sensor and using a counter.

Claim 6 (previously presented): The method according to claim 5, wherein the position of the oscillating mirror is determined by correlating the modulated brightness level with a detector signal generated from the light sensor.